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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/421,767	03/15/2012	Norio MASUDA	FPA-2011-0332-NEC-US-KSe	7785

21254 7590 01/31/2017
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EXAMINER

JUSTUS, RALPH H

ART UNIT	PAPER NUMBER
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2649

MAIL DATE	DELIVERY MODE
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01/31/2017

PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte NORIO MASUDA¹

Appeal 2016-004306
Application 13/421,767
Technology Center 2600

Before MICHAEL J. STRAUSS, DANIEL N. FISHMAN, and
JAMES W. DEJMEK, *Administrative Patent Judges*.

STRAUSS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1 and 4–22. Claims 2 and 3 have been canceled. App. Br. 15. We have jurisdiction over the remaining pending claims under 35 U.S.C. § 6(b).

We affirm.

¹ Appellant identifies NETCOMSEC Co., Ltd., as the real party in interest. App. Br. 1.

THE INVENTION

Appellant's invention is directed to communication "using magnetic field coupling type transmitting and receiving elements." Spec. 1.

According to the Specification, the transmitting and receiving elements include ferromagnetic substances and are positioned to face each other across a housing. Spec. 6. In a disclosed embodiment, flux concentrators are embedded between the ends of the ferromagnetic substances. Spec. 10. The flux concentrators provide magnetic field coupling between the transmitting and receiving elements of the housing. Spec. 10.

Claim 1, reproduced below with a disputed limitation emphasized in *italics*, is representative of the claimed subject matter:

1. A communication device comprising:

a first transmitting and receiving element that generates and detects a magnetic field; and

a second transmitting and receiving element that detects a magnetic field generated by said first transmitting and receiving element and generates a magnetic field detectable by said first transmitting and receiving element,

wherein said first and second transmitting and receiving elements transmit and receive a signal through magnetic field coupling between ends of said first and second transmitting and receiving elements,

wherein each of said first and second transmitting and receiving elements comprises:

a solenoid coil; and

a U-shaped ferromagnetic substance wound with the solenoid coil, and wherein ends of the ferromagnetic substance included in said first transmitting and receiving element and in said second transmitting and receiving element are arranged so as to face each other, further comprising:

a flux concentrator that concentrates magnetic flux, between the ends of the ferromagnetic substance included in said first transmitting and receiving element and in said second transmitting and receiving element.

REFERENCES AND REJECTIONS²

The following rejections made by the Examiner to the claims on appeal and the prior art relied upon in the rejections made are:

Claims 1, 4, 6–10, and 18–22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bennett (US 2012/0164943 A1; June 28, 2012 (filed Feb. 6, 2012) (benefit to 12/241,245, filed Sept. 30, 2008)), Rhodes et al. (US 2009/0156119 A1; June 18, 2009) (“Rhodes”), and Pissanetzky (US 5,798,679; Aug. 25, 1998). Final Act. 4–6.³

Claims 5, 11, 12, and 15–17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bennett, Rhodes, Pissanetzky, and Ishibashi et al. (US 2010/0156750 A1; June 24, 2010) (“Ishibashi”). Final Act. 7–9.

Claims 13 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bennett, Rhodes, Pissanetzky, Ishibashi, and Chatterjee et al. (US 2010/0081473 A1; Apr. 1, 2010) (“Chatterjee”). Final Act. 10–11.

² The rejection of claim 18 under 35 U.S.C. § 112, first paragraph has been withdrawn. Ans. 10.

³ Claim 4 is mistakenly omitted from the header for this rejection, but otherwise appears in the body of the rejection. Final Act. 4–5. We find the Examiner’s typographical error to be harmless.

APPELLANT'S CONTENTIONS

1. “The alleged device of Pissanetzky does not concentrate the magnetic flux unlike the claimed invention which may concentrate the magnetic flux.” App. Br. 9 (emphases omitted).
2. “Moreover, Pissanetzky certainly does not concentrate the magnetic flux between the ends of the ferromagnetic substance as defined in claim 1.” App. Br. 9 (emphasis omitted).
3. “[A] person of ordinary skill in the art would have no motivation to combine the alleged flux concentrator of Pissanetzky with Bennet and Rhodes, let alone completely change the structural configuration of the flux concentrator of Pissanetzky to teach the claimed invention.” App. Br. 12–13.

ANALYSIS⁴

We have reviewed the Examiner's rejections in light of Appellant's arguments the Examiner has erred. App. Br. 6–14; Reply Br. 1–6. We are not persuaded by Appellant's contentions regarding the pending claims and, in connection therewith, adopt as our own the findings and reasons set forth by the Examiner in the action from which this appeal is taken (Final Act. 2–11), and as set forth by the Examiner in the Answer in response to arguments made in Appellant's Appeal Brief (Ans. 2–11). We highlight and address specific findings and arguments below.

⁴ In this Opinion, we refer to Appellant's Appeal Brief (“App. Br.,” filed September 25, 2015); Appellant's Reply Brief (“Reply Br.,” filed March 9, 2016); the Final Office Action (“Final Act.,” mailed February 27, 2015); and the Examiner's Answer (“Ans.,” mailed on February 10, 2016).

Appellant contends the Examiner erred in finding the combination of Bennett, Rhodes, and Pissanetzky teaches or suggests the disputed limitation of “a flux concentrator that concentrates magnetic flux, between the ends of the ferromagnetic substance included in said first transmitting and receiving element and in said second transmitting and receiving element,” as recited in claim 1. App. Br. 9–13; Reply Br. 1–4. In particular, Appellant asserts Pissanetzky teaches flux pipes of different diameters that are guided by a current sheet. App. Br. 9–10 (citing Pissanetzky Figs. 25–27; text citation omitted). Appellant further asserts “Pissanetzky achieves flux concentration by a relationship between pipes having different cross-sectional areas.” Reply Br. 2 (citing Pissanetzky, col. 16, ll. 30–39). Appellant argues “Pissanetzky would not achieve flux concentration since Pissanetzky achieves flux concentration due to a relationship of different cross sectional areas. Accordingly, by merely comb[in]ing a pipe of Pissanetzky, the flux would not even be concentrated.” Reply Br. 2. In support of this contention, Appellant directs attention to a visual comparison between Figure 25 of Pissanetzky⁵ and Figure 6 of Appellant’s invention (App. Br. 10) and argues “the flux concentrators of Pissanetzky are extremely different than the claimed flux concentrator 21 of the claimed invention.” (App. Br. 11 (emphasis omitted)).

We are unpersuaded of Examiner error. At the outset, we note limitations not explicit or inherent in the language of a claim cannot be imported from the specification. *See E-Pass Techs., Inc. v. 3Com Corp.*,

⁵ We note Appellant mistakenly refers to Figure 25 of Pissanetzky as Figure 6. App. Br. 10. We find the mistaken reference to Figure 6 constitutes harmless error.

343 F.3d 1364, 1369 (Fed. Cir. 2003). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. *See In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

The Examiner finds Pissanetzky teaches devices for concentrating magnet flux using flux concentrators. Final Act. 5 (citing Pissanetzky, Abstract, col. 15, l. 63–col. 16, l. 39). We agree with the Examiner’s findings and adopt them as our own. Pissanetzky is directed to magnetic flux piping systems including devices for concentrating magnetic flux.

Pissanetzky Abstract. Figures 25–27 of Pissanetzky illustrate devices for concentrating magnetic flux along one or more axes. Pissanetzky, col. 15, l. 63–col. 16, l. 39. For example, Figure 27 of Pissanetzky is illustrative and is reproduced below.

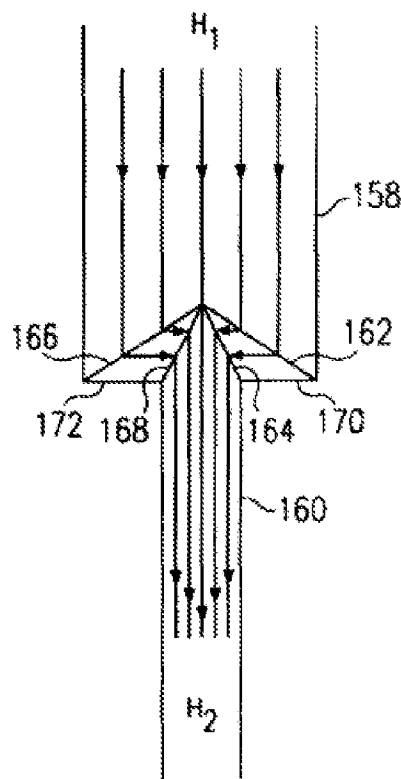


FIG. 27

“The device of FIG. 27 concentrates magnetic flux and directs it from flux pipe 158 into flux pipe 160.” Pissanetzky, col. 16, ll. 17–18. As shown, “[f]lux pipe 160 has a smaller cross-sectional area than flux pipe 158.” Pissanetzky, col. 16, ll. 18–19. When construing claim terminology during prosecution before the Office, claims are to be given their broadest reasonable interpretation consistent with the specification, reading claim language in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). In this case, Appellant’s Specification is devoid of any limiting definition of *concentrating* magnetic flux. For example, claim 1 does not require each of the U-shaped ferromagnetic substances of the first and second transmitting and receiving elements to be of the same or constant cross-sectional shape or area such that the interface therebetween would not concentrate magnetic flux as per Pissanetzky’s embodiments from Figures 25–27. Therefore, given the lack of a relevant limiting definition in Appellant’s Specification, the Examiner broadly but reasonably construes “a flux concentrator that concentrates magnetic flux,” consistent with the Specification, to encompass and be taught by Pissanetzky’s flux concentrators involving multiple pipes having different cross-sectional areas.

Appellant further argues Pissanetzky fails to teach how the flux pipes would concentrate “magnetic flux, between the ends of the ferromagnetic substance included in said first transmitting and receiving element and in said second transmitting and receiving element,” as recited in claim 1. App. Br. 9, 11; *see also* Reply Br. 3.

We are unpersuaded of Examiner error. Although Pissanetzky discloses specific embodiments for concentrating flux, which include flux

pipes of different sizes, Appellant has provided insufficient evidence to demonstrate that such embodiments would not have enabled one of ordinary skill in the art to make any necessary modifications for use in the structure taught by the combination of Bennett and Rhodes. Notably, arguments of counsel cannot take the place of factually supported objective evidence. *See, e.g., In re Huang*, 100 F.3d 135, 139–40 (Fed. Cir. 1996). Furthermore, not only are the specific features argued to be incompatible absent from the disputed claims, but Appellant’s argument improperly relies on wholesale incorporation/combination of methodologies rather than what the combination of Bennett, Rhodes, and Pissanetzky teaches and suggests.

The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.

In re Keller, 642 F.2d 413, 425 (CCPA 1981). The artisan is not compelled to blindly follow the teaching of one prior art reference over the other without the exercise of independent judgment. *See Lear Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 889 (Fed. Cir. 1984). We are further mindful that the skilled artisan would “be able to fit the teachings of multiple patents together like pieces of a puzzle” because the skilled artisan is “a person of ordinary creativity, not an automaton.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 420–421 (2007). Here, Appellant has not demonstrated the Examiner’s proffered combination in support of the conclusion of obviousness would have been “uniquely challenging or difficult for one of ordinary skill in the art.” *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485

F.3d 1157, 1162 (Fed. Cir. 2007) (citing *KSR*, 550 U.S. at 418).

Furthermore, even if otherwise, “a non-enabling reference may qualify as prior art for the purpose of determining obviousness under 35 [§] U.S.C. 103.” *Symbol Techs. Inc. v. Opticon Inc.*, 935 F.2d 1569, 1578 (Fed. Cir. 1991); *see also Beckman Instruments, Inc. v. LKB Produkter AB*, 892 F.2d 1547, 1551 (Fed. Cir. 1989) (indicating an inoperative reference “is prior art for all that it teaches.”)

Appellant’s argument is further unpersuasive because Appellant considers the teachings of Bennett, Rhodes, and Pissanetzky in isolation and fails to rebut specifically the Examiner’s ultimate legal conclusion of obviousness that is based on the combination of Bennett, Rhodes, and Pissanetzky. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Specifically, the Examiner relies on Rhodes, *not Pissanetzky*, for disclosing each first and second transmitting and receiving element comprising a U-shaped ferromagnetic substance including ends arranged so as to face each other. Final Act. 4–5 (citing Rhodes ¶¶ 26, 31, Fig. 1); *see also* Ans. 11. As discussed *supra*, the Examiner relies on Pissanetzky for disclosing a flux concentrator that concentrates magnetic flux. Final Act. 5 (citing Pissanetzky, Abstract, col. 15, l. 63–col.16, l. 39); *see also* Ans. 10–11 (Pissanetzky, col. 10, l. 5, Fig. 27). Thus, the Examiner finds the combination of Rhodes and Pissanetzky teaches a flux concentrator that concentrates magnetic flux, between the ends of the ferromagnetic substance included in the first and second transmitting and receiving elements. We

agree with the Examiner's findings and conclusions and adopt them as our own.

Appellant further argues a person of ordinary skill in the art would not be motivated to modify the flux concentrators of Pissanetzky to concentrate magnetic flux between the ends of ferromagnetic substance "other than the Examiner's conclusory statement, which is based on hindsight, that the mere presence of a flux concentrator in Pissanetzky would make the claimed invention obvious." Reply Br. 3; *see also* App. Br. 13. Appellant further argues the combination of Bennett, Rhodes, and Pissanetzky changes the structural configuration of Pissanetzky's flux concentrator and, therefore, "Pissanetzky would lose all benefits of the teaching of Pissanetzky." Reply Br. 5; *see also* App. Br. 12–13.

We are not persuaded by Appellant's arguments. "[W]hen a patent 'simply arranges old elements with each performing the same function it had been known to perform' and yields no more than one would expect from such an arrangement, the combination is obvious." *KSR*, 550 U.S. at 417 (quoting *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 282 (1976)). The Court went on to state "the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 550 U.S. at 418. Additionally,

[a]ny judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper.

In re McLaughlin, 443 F.2d 1392 1313–14 (CCPA 1971).

The Examiner finds, *inter alia*, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the flux concentrator of Pissanetzky with the magnetic coupling between the ends of the transmit and receive elements of Rhodes “in order to provide magnetic field coupling between ends of elements of transmitter/receiver systems using a flux concentrator concentrating magnetic flux at the ends of the ferromagnetic substance.” Final Act. 5. We find the Examiner has articulated a reason based on rational underpinnings, for the proposed combination, as discussed *supra*, and Appellant has not persuaded us the Examiner improperly relied on information gleaned only from Appellant’s Specification in making the proposed combination. *See KSR*, 550 U.S. at 418; *see also McLaughlin*, 443 F.2d at 1313–14.

Accordingly, we sustain the Examiner’s rejection of independent claim 1. Additionally, we sustain the Examiner’s rejections of dependent claims 4–22, which were not argued separately. *See App. Br. 13.*

DECISION

We affirm the Examiner’s decision to reject claims 1 and 4–22.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 41.50(f).

AFFIRMED